SAFETY COMPLIANCE TESTING FOR FMVSS NO. 110 TIRE SELECTION AND RIMS

BAYERISCHE MOTOREN WERKE AG 2020 BMW 330i FOUR-DOOR PASSENGER CAR NHTSA NO. C20204100

U.S. DOT SAN ANGELO TEST FACILITY 131 COMANCHE TRAIL, BUILDING 3527 GOODFELLOW AFB, TEXAS 76908



October 9, 2019

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
NEF-220
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590

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INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2020 BMW 330i four-door passenger car was tested to determine if the vehicle was in compliance with the requirements of FMVSS No. 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure TP-110P-04, dated September 28, 2012.

1.2 <u>TEST VEHICLE</u>

The test vehicle was a 2020 BMW 330i four-door passenger car. Nomenclatures applicable to the test vehicle are:

A. <u>Vehicle Identification Number</u>: WBA5R1C0XLFH53825

B. NHTSA Number: C20204100

C. Manufacturer: Bayerische Motoren Werke AG

D. Manufacture Date: 07/2019

1.3 TEST DATE

The test vehicle was tested on October 8, 2019.

TEST PROCEDURE AND SUMMARY OF RESULTS

2.1 TEST PROCEDURE

Prior to test, the test vehicle was inspected for completeness, systems operability and appropriate fuel and liquid levels, i.e. oil and coolant. The vehicle was then photographically documented. The right front and left rear wheels were removed from the vehicle. Pertinent information on the tires and rims furnished with the vehicle was recorded. Tires and rims were photographed.

The vehicle tire placard was photographed and checked for compliance to location, format, and information requirements. Subsequent events included weighing the vehicle to establish delivered curb weight and the distribution of weight on the front and rear axles and each wheel position. Vehicle was ballasted to Normal Load weight, Full Occupant Load weight, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for the Normal, Full, and Maximum Vehicle Load weights. The tires and rims labeled and installed on the vehicle were verified to be appropriate for the loading and load ratings of the vehicle. The owner's manual was checked for all required information on placard, tire loading, and general tire and loading parameters. Rim retention testing was not performed on the BMW 330i.

2.2 <u>SUMMARY OF RESULTS</u>

The 2020 BMW 330i test vehicle appears to be in compliance with the FMVSS 110 requirements tested.

TEST DATA

DATA SUMMARY SHEET

VEHICLE MAKE/MODEL/BODY STYLE:	2020 BMW 330i Sedan	
VEHICLE NHTSA NUMBER: C20204100	VIN: WBA5R1C0X	LFH53825
VEHICLE TYPE: Passenger car	DATE OF MANUFACTURE:	07/2019
LABORATORY: U.S. DOT San Angelo Test Facility	<u>. </u>	
PASSENGER CAR REQUIREMENTS	P	ASS/FAIL
General (Data Sheet 2)		
The vehicle is equipped with tires that meet the requir of S139. (S110, S4.1)	rements	PASS
Tire Load Limits (Data Sheet 5)		
The vehicle maximum load on the tire shall not be gremaximum load rating as marked on the sidewall of the		PASS
The vehicle normal load on the tire is not greater than 94 percent of the load rating at the vehicle manufactu recommended cold inflation pressure for that tire. (S1	rer's	PASS
Placard and Tire Inflation Pressure Label (Data Sh	eets 4 and 5)	
The placard and tire inflation pressure label (if provide located correctly, and display the information and form (S110, S4.3)	· —	PASS
No inflation pressure other than the maximum permission pressure may be shown on the placard and, if any, tirelabel unless as required. (S110, S4.3.4)		PASS
Rim (Data Sheet 3)		
Each rim is constructed to the dimensions of a rim speapplication. (S110, S4.4.1(a))	ecified for the	PASS
Vehicle rims retain deflated tires during a controlled b (S110, S4.4.1(b))	rake application.	PASS
Owner's Manual (Data Sheet 6)		
Owner's manual or other document has discussion of Loading and Tires. (575.6 (a)(4))	Vehicle Placard	PASS
Owner's manual includes exact statement relating to 'Determining Correct Load Limits." (575.6(a)(5)	"Steps for	PASS
REMARKS: The rim retention test required by FMVS	SS No.110, paragraph S4.4.1(l	o) was not
executed on the subject BMW 330i.		

TEST VEHICLE INFORMATION/RECEIVING INSPECTION DATA SHEET 1

VEHICLE MAKE/MODEL/BODY STYLE: 2020 BMW 330i Sedan					
VEHICLE NHTSA NUMBER: C20204100 TEST DATE: October 8, 2019					
VIN	VIN: WBA5R1C0XLFH53825 MANUFACTURE DATE: 07/2019				
	GVWR: 2,080) kg	4,586 lbs. GAWR (front): 99	5 kg	, 2,194 lbs.
			GAWR (rear):1,16	0 kg	, 2,557 lbs.
SE	ATING POSITIONS:		TOTAL <u>5</u> FRONT <u>2</u>	F	REAR 3
OD	OMETER READING	AT :	START OF TEST: 26 km (16 mi)		
ΕN	GINE DATA:		4 Cylinders 2.0 Liters		Cubic Inches
TR.	ANSMISSION DATA:		X Automatic Manual	8	No. of Speeds
FIN	IAL DRIVE DATA:		X Rear Drive Front Drive _		4 or All Wheel Drive
NS ⁻	TALLED VEHICLE EC	QUIF	PMENT:		
Χ	Power Windows	Х	Blind Spot Monitoring		Block Heater
Χ	Power Door Locks	Х	Running Boards	Х	Remote Start
Χ	Power Seat(s)	Х	Heated Mirrors	Х	Other:
Х	Navigation System	Х	Floor/Trunk Mats		Power Folding Side Mirrors
Χ	Satellite Radio	Х	Bluetooth		Lane Keep Assist System
Χ	Sun Roof or T-Top	Х	Heated/Cooled Seats		Dynamic Brake Control
Χ	Cruise Control		Cargo Net/Luggage Compartment Cover		Cornering Brake Control
Χ	Splash Guards		Upgraded Wheel Package		
	Roof Rack		Trailer Hitch/Tow Package		
Χ	Backup Camera		Grill Upgrade		
Does vehicle labeling identify optional and accessory equipment installed by the distributor and/or dealer: () YES (X) NO REMARKS: None					
RECORDED BY: Anthony Walden DATE: October 8, 2019					
	APPROVED BY: Kerrin Bressant				
	121 = 2 2 1 1 1 1 1 1 1 1				

VEHICLE TIRE IDENTIFICATION DATA SHEET 2

VEHICLE MAKE/MODEL	/BODY STYLE:	2020 BMW 330i Sedan		
VEHICLE NHTSA NUMBER: C20204100		VIN: WBA	\5R1C0XLFH53825	
LABORATORY: U.S. D	OT San Angelo Test Facility	TEST DATE:	October 8, 2019	
All times are the suspicion (such			0 () NO	
All tires on the vehicle (exc	cluding the spare) are the sai	me size: (X)YE	S ()NO	
Spare tire is the same size	e as all other tires:	()YES	6 () NO (X) N/A	
Tire Sidewall	Right Front	Left Rear (If different)	Spare Tire (If different)	
Manufacturer and Model	Pirelli Cinturato P7			
Tire Size Designation	225/45R18			
Load Index/Speed Symbol	95 H			
Maximum Inflation Pressure	340 kPa, 50 psi			
Maximum Load Rating	690kg, 1,521 lbs.			
Tread/Traction/Temperature	500 / A / A			
Tires Have "DOT" Markings	Yes			
DOT Number: Right	Front <u>93K1W4541819</u>	Left Front 93K1	W4541819	
Right	Rear <u>93K1W4541819</u>	Left Rear 93K1	W4541819	
5	Spare N/A			
DATA INDICATES COM	PLIANCE:	PAS	S/FAIL : PASS	
DATA INDICATES COM	LIANOL.	r Ao	3/1 AIL. 1 A33	
REMARKS: None				
RECORDED BY: Antho	ony Walden	DATE: O	ctober 8, 2019	
APPROVED BY Kerrir	n Bressant			

VEHICLE RIM IDENTIFICATION DATA SHEET 3

VEHICLE MAKE/MODEL/BODY STYLE	ii	2020 BMW 33	0i Sedan
VEHICLE NHTSA NUMBER: C20204	100	VIN: W	BA5R1C0XLFH53825
LABORATORY: U.S. DOT San Angelo	Test Facility	TEST DATE:	October 8, 2019
Rim Markings (if available):	Right Fr	ont	Left Rear (if different)
Manufacturer's Name, Symbol or Trademark		3 (G) (167)	
Rim Size	W WILL IN	TOTAL.	
Date of Manufacture	भूत ती वी वी वी वी वी वी मूल स्तु तू हुई हूं		
Does Rim contain 'DOT' symbol? (YES/NO)	No		
Other Rim Markings	See Figure 5.1	3	
Rim Inspection Comments:	None		
Rim Size:		sured Width	Measured Rim Diameter
Right Front Wheel225/45R18 Left Rear Wheel (if different)			457.2 mm (18.0 in)
Does stamped rim size (if available) agree Right front rim: (X)YES ()NO Installed rims are suitable for installed tires	Left rear rir	m: (X)YES	() NO
Reference document: 2018 The Europea	an Tvre and Rin	n Technical Ord	anisation
DATA INDICATES COMPLIANCE: REMARKS: None			PASS/FAIL: PASS
RECORDED BY: Anthony Walden APPROVED BY: Kerrin Bressant		_ DATE: _	October 8, 2019

VEHICLE PLACARD, AND TIRE INFLATION PRESSURE LABEL DATA SHEET 4 (1 of 3)

VEHICLE MAKE/MODEL/BODY STYLE:		2020 BMW 330i Seda	an
VEHICLE NHTSA NUMBER: C2020410	00_	VIN: WBA5R1	C0XLFH53825
LABORATORY: U.S. DOT San Angelo	Test Faci	ility TEST DATE: Oc	tober 8, 2019
dentification of Vehicle Labeling			
	Yes/No	Location	PASS/FAIL
1. Monroney Label	Yes	Included, but not affixed	Not Applicable
2. Certification Label*	Yes	Driver side B Pillar	Not Applicable
3. Alterer's Label (if attached)	_No_		Not Applicable
4. Vehicle Placard*	Yes	Driver side B Pillar	PASS
5. Tire Inflation Pressure Label* (if attached)	No		
Load Carrying Capacity Modification Label* (if attached)	No_		
7. Dealer/Distributor Optional Equipment Added Label (if attached)	No		Not Applicable

^{*} Labels must be located as specified in section 13.4 of test procedure.

VEHICLE PLACARD, AND TIRE INFLATION PRESSURE LABEL DATA SHEET 4 (2 of 3)

Vehicle Placard

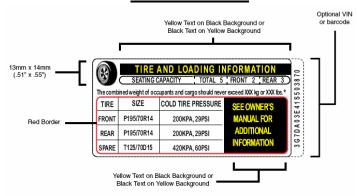


FIGURE 1 (70 FR 14425)

Vehicle Placard has the exact color and formal language.	at as specified in Figure 1 and text is in English (X)YES ()NO
Vehicle Placard is permanently affixed.	(X)YES ()NO
Vehicle Placard Information:	
Combined weight of occupants and	d cargo <u>375 kg</u>
Seating Capacity: Total5_	Front 2 Rear 3
Is the number of belted seating pos capacity?	itions the same as the labeled seating (X)YES ()NO

(X)YES ()NO

Is the tire size and pressure provided?

VEHICLE PLACARD, AND TIRE INFLATION PRESSURE LABEL DATA SHEET 4 (3 of 3)

Vehicle Placard Tire Information:

		Front	Rear
Tire size:	Tire size:		225/45R18
Tire Inflation	on Pressure:	220 kPa, 32 psi	260 kPa, 38 psi
Are the size	es of the installed tires	the same as the sizes (X)YE	of the labeled tires? ES ()NO
	ed cold tire inflation presolution presolution	•	than the sidewall labeled
Front axl	e: (X)YES ()N	O Rear axle:	(X)YES ()NO
Vehicle Certificat	ion Label information	n:	
	Tire Size		suitable or Tire?
Front A	xle N/A	N/A	N/A_
Rear Ax	de <u>N/A</u>	<u>N/A</u>	N/A
Monroney Label	Information: N/A		
Tire Siz	e: Front	N/A Rear	N/A
Installed tire	e sizes same as labele	ed tire sizes? () YES	S ()NO (X)N/A
DATA INDICATES C	OMPLIANCE:		PASS/FAIL: PASS
REMARKS: None			
DECORDED BY A	natha a no co NAT a l'al acce	D 4 T	5. Ostahan 0. 2040
RECORDED BY: A	•	DATI	E: <u>October 8, 2019</u>
APPROVED BY: K	errin Bressant		

CURB WEIGHT, NORMAL, AND FULL LOAD WEIGHTS AND FOR MAXIMUM VEHICLE WEIGHT DATA SHEET 5 (1 of 4)

VEHICLE MAKE/MODEL/BODY STYLE: 2020 BMW 330i Sedan					
VEHICLE NHTSA NUMBER: C20204100 VIN: WBA5R1C0XLFH5382					
LABORATORY: _U	J.S. DOT San Aı	ngelo Test Fa	acility TEST DA	ATE: Octobe	r 8, 2019
Full Fluid Levels:	Fuel Full C	oolant Full	_ Other Fluids*	Full	
*Engine oil, transmis windshield washer fl		oolant, brake fl	luid, power steering	g fluid, &	
Tire Pressures:	LF <u>22</u>	0 kPa_	LR _ 260 kF	^o a_	
	RF <u>22</u>	0 kPa	RR <u>260 k</u> F	Pa_	
Tire Load Ratings a Inflation Pressure.	t Vehicle Placard	d or Tire Infla	tion Pressure La	bel Recommend	ed Cold Tire
			Front Axle	Rear Axle	
Labe	led tire size	_	225/45R18	225/45R18	
Labe	led cold inflation	pressure _	220 kPa	260 kPa	
Load	rating at this pre	essure*	623 kg	712 kg	
*Refe	rence source: 20	18 The Europ	ean Tyre and Rim	Technical Organis	sation
A. MEASURED CU	JRB WEIGHT W	ITH INSTAL	LED OPTIONS A	AND ACCESSOF	RIES
LF	400.5 kg	LR	390.5 kg		
RF	415.5 kg	RR	384.5 kg		
Front Axle	816.0 kg	Rear Axle	775.0 kg		
	Total Vehicle	1591.0 kg			

CURB WEIGHT, NORMAL, AND FULL LOAD WEIGHTS AND FOR MAXIMUM VEHICLE WEIGHT DATA SHEET 5 (2 of 4)

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

(5)

(1)	Seating Capacity from Vehicle Placard = Total <u>5</u> Front <u>2</u> Rear <u>3</u>
(2)	Normal Load Number of Occupants (Table in Section 10) = 3
	Occupant Distribution: Front Seat 2 Rear Seat 1
(3)	Total Normal Occupant Load: <u>204 kg</u> [# of occupants x 68 KG per occupant]
(4)	Measured Normal Load on Axles:
	LF <u>441.5 kg</u> LR <u>452.5 kg</u>
	RF <u>455.0 kg</u> RR <u>446.0 kg</u>
Fro	ont Axle <u>896.5 kg</u> Rear Axle <u>898.5 kg</u>
	Total Vehicle 1,795.0 kg
Calcu	ulated Vehicle Normal Load on the Tire:
Fron	t Tires [measured front axle normal load/2] = 448.25 kg
Real	r Tires [measured rear axle normal load/2] = 449.25 kg

(6) Calculated 94% of tire load rating at recommended cold inflation pressure:

	Front Axle	Rear Axle
Load rating at recommend cold inflation pressure =	623 kg	712 kg
94% of load rating =	586 kg	669 kg

Vehicle Normal Load on the Tire must not be greater than 94% of Load Rating Value.

		PASS/FAIL
[B.(5) <b.(6)]< td=""><td>Front Tires</td><td>PASS</td></b.(6)]<>	Front Tires	PASS
	Rear Tires	_PASS_

CURB WEIGHT, NORMAL, AND FULL LOAD WEIGHTS AND FOR MAXIMUM VEHICLE WEIGHT DATA SHEET 5 (3 of 4)

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

(1)	Seating Capacity from Placard:
-----	--------------------------------

Total 5 Front 2 Rear 3

N/A

- (2) Full Occupant Load: 340 kg
 [# of total occupants from C.(1) x 68 KG per occupant]
- (3) Measured Vehicle Weight with Full Occupant Load:

LF <u>452.5 kg</u> LR <u>510.5 kg</u>
RF 470.5 kg RR 497.5 kg

Front Axle 923.0 kg Rear Axle 1,008.0 kg

Total Vehicle 1,931.0 kg

D. MEASURED MAXIMUM VEHICLE LOAD WEIGHT

(1) Vehicle Capacity Weight (from placard): 375 kg

Reduced Capacity Weight (if applicable):
(2) (from Load Carrying Capacity Modification Label)

- Reduced Vehicle Capacity Weight:
 (3) (subtract (2) from (1)) N/A
- (4) Full Occupant Load (from C.(2)): 340 kg
- (5) Luggage/Cargo Load (subtract (4) from (1)): 35 kg
- (6) Measured Vehicle Maximum Load on Axles:

LF <u>450.0 kg</u> LR <u>530.0 kg</u> RF 468.0 kg RR 518.0 kg

Front Axle 918.0 kg Rear Axle 1,048.0 kg

Total Vehicle 1,966.0 kg

CURB WEIGHT, NORMAL, AND FULL LOAD WEIGHTS AND FOR MAXIMUM VEHICLE WEIGHT DATA SHEET 5 (4 of 4)

(7)	Calculated Vehicle Maximum Load on the Tire:						
Front Tires [measured front axle maximum load/2] = 459.0 kg Rear Tires [measured rear axle maximum load/2] = 524.0 kg							
	Tire S	idewall Maximum L	oad Ra	tings:			
(8)				Front	R	Rear	
	Install	ed Tire Size		225/45R18	225/	45R18	
	Max. I	oad Rating on Side	wall _	690 kg	69	00 kg	
Vehicle Maximarked on the		oad on the tire must Sidewall.	t not be	greater than t	he Maximu	ım Load Ratinຸ	3
					PAS	S/FAIL	
		[D.(7) <d.(8)]< td=""><td>Fron</td><td>t Tires</td><td>P/</td><td>ASS_</td><td></td></d.(8)]<>	Fron	t Tires	P/	ASS_	
			Rea	Tires	P/	ASS_	
DATA INDIC	CATES	COMPLIANCE:				PASS/FAIL:	PASS
REMARKS:	None						
RECORDE	D BY:	Anthony Walden			DATE: _	October 8,	2019
∆PPR∩\/FΓ) BV·	Kerrin Bressant					

OWNER'S MANUAL REQUIREMENTS DATA SHEET 6 (1 of 2)

VEHICLE MAKE/MODEL/BODY STYLE:	2020 BMW 330i Sedan	
VEHICLE NHTSA NUMBER: C20204100	VIN: WBA5R1C0XLFH53825	
LABORATORY: U.S. DOT San Angelo Test Facility	TEST DATE: October 8, 2019	

Owner's Manual Discusses:

Part 575.6(a) Paragraph	Required Discussion Topic	Discussed in Manual? (YES/NO)	Page Numbers
(4)(i)	Tire labeling, including a description and explanation of each marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN).	Yes	277 - 279
(4)(ii)	(A) Description and explanation of recommended cold tire inflation pressure.	Yes	273
	(B) Description and explanation of FMVSS NO. 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s).	Yes	273
	(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.	Yes	272
	(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.	Yes	272 - 273
(4)(iii)*	Glossary of tire terminology, including "cold tire pressure," maximum inflation pressure," and "recommended inflation pressure," and all non-technical terms defined in S3 of FMVSS NO. 110 & 139.	Yes	272 – 273
(4)(iv)	Tire care, including maintenance and safety practices.	Yes	272 - 287
(4)(v)	(A) Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity.	Yes	247 - 251
	(B) Description and explanation for calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle's cargo and luggage capacity decreases as the combined number and size of occupants increases.	Yes	247 - 248
	(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.	Yes	277
	(D) Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires.	Yes	278

^{*}Owner's manual does not contain a glossary. The defined terms were located through the manual.

OWNER'S MANUAL REQUIREMENTS DATA SHEET 6 (2 of 2)

The following verbatim statement, in the English language, is provided verbatim in the Owner's Manual. Reference Part 575.6(a)(5) YES (X) NO ()

Pages: 247 - 248

Steps for Determining Correct Load Limit --

- (1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- (2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- (3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- (4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 650 lbs.)
- (5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- (6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

DATA INDICATES COMPLIANCE:				PASS/FAIL:		
REMARKS: No	ne					
RECORDED BY	: Anthony L. Walden		DATE:	October 8, 20	019	
APPROVED BY:	Kerrin Bressant					

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

		MODEL/		NEXT
EQUIPMENT	DESCRIPTION	SERIAL NO	CAL. DATE	CAL. DATE
FLOOR SCALES	INTERCOMP SW	PART #100156	10/25/2018	10/25/2019
(VEHICLE &	DELUXE SCALES	SERIAL #27032382-		
BALLAST)		23746		
AIR PRESSURE	ASHCROFT	MODEL DG25,	12/13/2018	12/13/2019
GAUGE	GENERAL PURPOSE	SERIAL		
	DIGITAL GAUGE	#3093017001		
DIGITAL LEVEL	STABIL A TYPE 196-	SERIAL #37948	11/15/2018	11/15/2019
	2E 48			

SECTION 5 PHOTOGRAPHS



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.1 THREE QUARTER FRONT VIEW FROM LEFT SIDE OF VEHICLE



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.2 THREE QUARTER REAR VIEW FROM RIGHT SIDE OF VEHICLE



FIGURE 5.3 VEHICLE CERTIFICATION LABEL

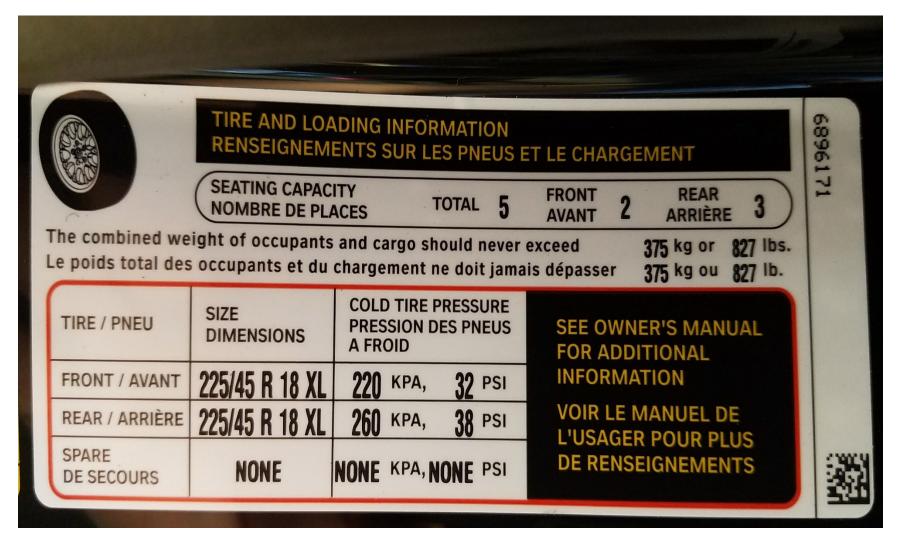


FIGURE 5.4 VEHICLE PLACARD

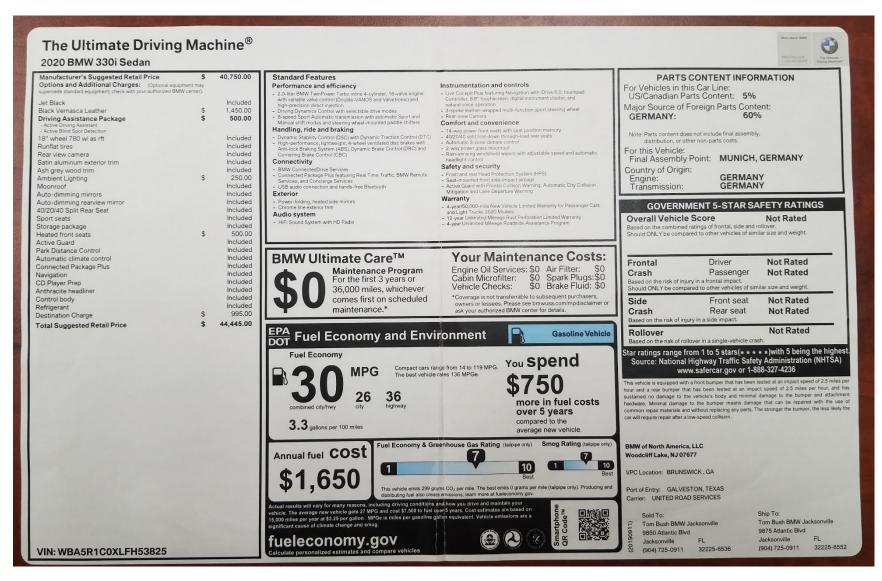


FIGURE 5.5 VEHICLE MONRONEY LABEL



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.6 TIRE SHOWING MANUFACTURER



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.7 TIRE SHOWING MODEL



FIGURE 5.8 TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.9 TIRE SHOWING MAX LOAD RATING AND MAX INFLATION PRESSURE



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.10 TIRE SHOWING DOT NUMBER



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.11 RIM SHOWING RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION





















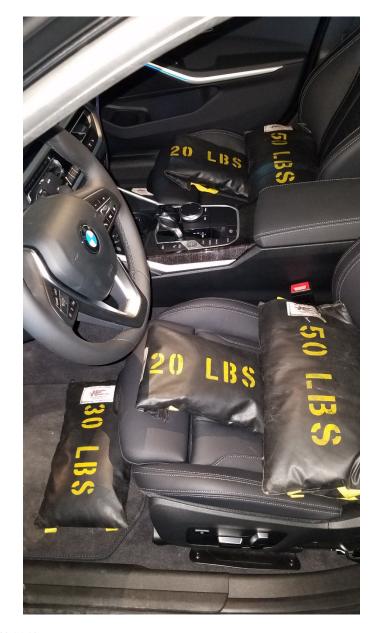


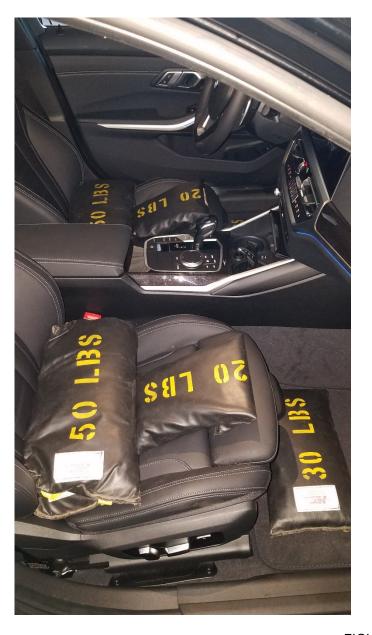




2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.12 RIM SHOWING RIM SIZE WITH FLANGE DESIGNATION, MANUFACTURER SYMBOL, DATE OF MANUFACTURE, LETTER DESIGNATION FOR SOURCE OF PUBLISHED DIMENSIONS AND DOT SYMBOL, ADDITIONAL RIM MARKINGS





2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.13 VEHICLE FRONT SEATS BALLASTED FOR NORMAL, FULL OCCUPANT, AND MAXIMUM LOADS



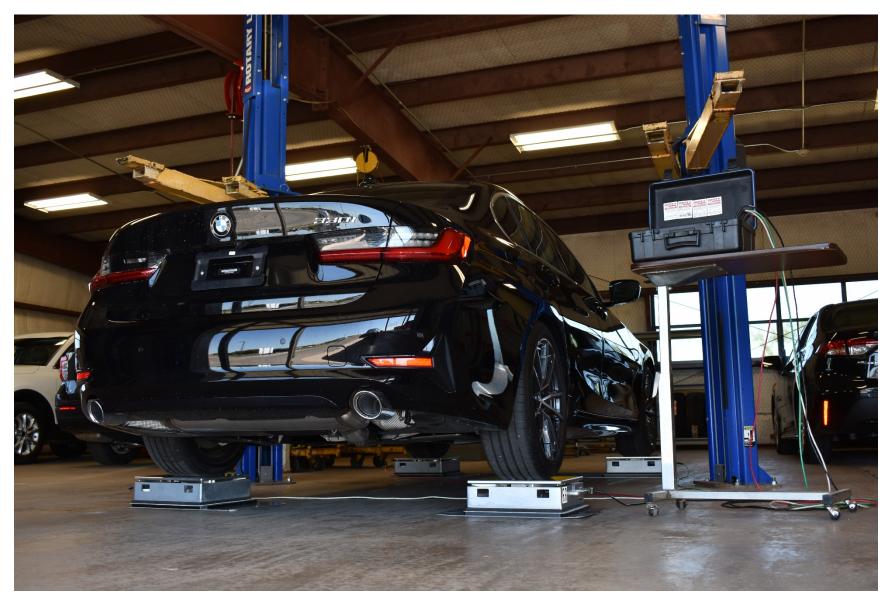


2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.14 VEHICLE REAR SEAT BALLASTED FOR NORMAL, FULL OCCUPANT, AND MAXIMUM LOADS



FIGURE 5.15 VEHICLE TRUNK BALLASTED FOR MAXIMUM LOAD



2020 BMW 330i NHTSA NO. C20204100 FMVSS NO. 110

FIGURE 5.16 VEHICLE ON WEIGHT SCALES